

RECONFIGURABLE MULTI-STAGE CROSSBAR

ABSTRACT

Method and apparatus for a dynamically reconfigurable, including partially reconfigurable, multi-stage crossbar switch using configurable circuitry is described. Configurable circuitry is configured to provide the multi-stage crossbar switch with at least: a first stage configured from a first portion of the configurable circuitry to provide a first plurality of crossbars; a second stage configured from a second portion of the configurable circuitry to provide a second plurality of crossbars; and a third stage configured from a third portion of the configurable circuitry to provide a third plurality of crossbars. The first stage having inputs, and the third stage having outputs. The inputs and the outputs user selectable for responsive path configurable input-to-output cross-connectivity via the first stage, the second stage and the third stage using the first interconnects and the second interconnects.